



## **D W G RIDLEY - SENIOR CORONER FOR WILTSHIRE AND SWINDON**

### **INVESTIGATION INTO THE DEATH OF FLT. LT. ALEXANDRE JAY PARR**

#### **CIVIL AVIATION AUTHORITY RESPONSE TO A REPORT ON ACTION TO PREVENT OTHER DEATHS PURSUANT TO REGULATION 29 OF THE CORONERS (INVESTIGATIONS) REGULATIONS 2013**

The Civil Aviation Authority (CAA) has considered carefully the report of the Senior Coroner to prevent future deaths and its response to the three areas in question is set out below:

##### **A) Overhaul of Engine**

The CAA's requirements for all National Permit to fly Aircraft<sup>[1]</sup> now includes an expectation that appropriate calendar periods for engine overhaul should complement or replace flying hour-related maintenance tasks in the aircraft maintenance programme for individual aircraft in the case of low utilisation. Any such calendar period(s) for engine overhaul are expected to be determined by consideration of manufacturers recommendations, usage, environmental conditions (e.g. hangarage) and type of operation (safety risk).

The CAA has reviewed the UK accident safety data related to engine failure on YAK-52 aircraft and confirmed that none of the reports (five in total between January 2003-January 2019) cited engine age or lack of maintenance as a contributory factor. Additionally, the CAA has reviewed recent overhaul data from a specialist Approved Organisation in Hungary which is responsible for the maintenance overhaul of 40-50 of this engine type per year. This review concluded that conventional (flight hour-related) component wear is the main reason for replacement at overhaul, rather than age.

Additionally, Mandatory Permit Directive, MPD 1998-001R2, which limits the life of the YAK-52 engine to 2250 flying hours has been superseded by a new MPD 2019-002 which reinforces the replacement lifespan of this engine and now also ensures owner/operators are aware of the need for a maximum calendar life, even if engine utilisation (flying hours) is low.

As a consequence of the review conducted by the CAA and the findings set out above, the applicability of Leaflet 70-80 does not need to be extended.

#### B) Safety Harness

As part of the follow-up action to AAIB Recommendation 2017-021 (11-2017) the CAA consulted with GA industry on the potential for mandating a replacement life (or lives) for safety harnesses on all GA aircraft. Following the outcome of this consultation, the CAA concluded that mandating a single life for the wide variety of GA aircraft configurations and types of utilisation may, in fact be counter-productive, in some cases serviceable harnesses requiring replacement and non-servicable harnesses continuing to be utilised. Instead of mandating a replacement life (or lives) for safety harnesses, the CAA will improve the current guidance material to enable a more informed decision to be made by both maintenance organisations and aircraft owners, on an ongoing use basis as to when the replacement of individual harness installations is appropriate.

The CAA is working with industry stakeholders on enhancing the existing Safety Notice 2018/005 to emphasise the need to take into account any manufacturer's specified 'calendar' lives for safety harnesses as well as to provide more guidance on individual aircraft-specific harness assessments/checks that could lead to withdrawal from use before such calendar periods expire. The CAA intends to publish a revised Safety Notice in the second quarter of 2019.

#### C) The Use of The Fuel Primer Pump in an Emergency

The CAA has established there are a number of different technical and human factors that would have an impact on the effectiveness of utilisation of the Fuel Primer Pump, particularly in emergency situations where it's use may, in certain circumstances be counter-productive. For this reason, the CAA has concluded it would not be appropriate for CAA to request the

---

<sup>[1]</sup> British Civil Airworthiness Requirements 553, Section A, Chapter A3-7, Issue 8 incorporating amendment 1, 15 December 2017

manufacturer to specify a rate. The use of the YAK Fuel Primer Pump in the event of a loss of power, will be included for discussion at the next CAA led YAK & Nanchang 'Continuing Airworthiness Forum' due to be held by the end of the second quarter of 2019 and attended by key owners and maintainers of the affected types. The Group will consider whether additional guidance to UK users would be useful and effective.

**Civil Aviation Authority**  
**Safety & Airspace Regulation Group**  
**General Aviation Unit**

**18 February 2019**